wherein said first memory is a read only memory (ROM) which is not re-writable; and

a second memory capable of storing a second program,

wherein said microprocessor applies said decryption function to an encrypted second program, which has been encrypted based on an encryption key, according to said decryption program and then stores a decrypted second program, which is executable by said microprocessor, in said second memory, when said encrypted second program is provided from outside the IC card,

wherein when said encrypted second program is not encrypted correctly, said writing of said encrypted second program is rejected.

3.   A program writable IC card, comprising:

a microprocessor;

a first memory which stores both a first program which is executed by said microprocessor and a write control program, executable by said microprocessor, having a decryption function,

wherein said first memory is a read only memory (ROM) which is not re-writable; and

a second memory in which may be written a second program,

wherein said microprocessor applies said decryption function to an encrypted second program, which has been encrypted based on an encryption key, and then writes a decrypted second program, which is executable by said microprocessor, in

2

said second memory according to said write control program, when said encrypted second program is inputted from outside the IC card,

wherein when said encrypted second program is not encrypted correctly, said writing of said encrypted second program is rejected.

4.   A program writable IC card comprising:

a microprocessor;

a first memory which stores a first program which is executed by said microprocessor and a second program, executable by said microprocessor, for decrypting an encrypted program,

wherein said first memory is a read only memory (ROM) which is not re-writable;

a second memory which is able to store a third program; and

an input unit which inputs an encrypted third program, which has been encrypted based on an encryption key, from outside the IC card,

wherein said microprocessor applies said second program to said encrypted third program inputted by said input unit, stores a decrypted third program which is executable by said microprocessor in said second memory and then executes said decrypted third program stored in said second memory, and

wherein when said encrypted third program is not encrypted correctly, said writing of said encrypted third program is rejected.

5.   A program writable IC card, comprising:

3

a microprocessor;

a first memory which stores a first program having a decryption function which is executed by said microprocessor,

wherein said first memory is a read only memory (ROM) which is not re-writable; and

a second memory which is able to store a second program,

wherein said microprocessor applies said decryption function to an encrypted second program, which has been encrypted based on an encryption key, according to said first program and then stores a decrypted second program which is executable by said microprocessor in said second memory, wherein said encrypted second program is initially supplied from outside the IC card, and

wherein when said encrypted second program is not encrypted correctly, said writing of said encrypted second program is rejected.

6.   A program writable IC card according to claim 2, wherein said first program performs an original function of the IC card, and

wherein when said encrypted second program is not encrypted correctly, said writing of said encrypted second program is rejected.

7.   A program writable IC card according to claim 3, wherein said first program is an IC card function program for realizing an original function of the IC card, and

4

wherein when said encrypted second program is not encrypted correctly, said writing of said encrypted second program is rejected.

8.   A program writable IC card according to claim 4, wherein said first program performs an original function of the IC card, and

wherein when said encrypted third program is not encrypted correctly, said writing of said encrypted third program is rejected.

9.   A program writable IC card according to claim 4, wherein said first program performs an original function of the IC card, and

wherein when said encrypted second program is not encrypted correctly, said writing of said encrypted second program is rejected.

10.   A processing method for a program writable IC card having a microprocessor, a first memory which stores both a first program which is executed by said microprocessor and a decryption program having a decryption function, wherein said first memory is a read only memory (ROM) which is not re-writable, and a second memory, said processing method comprising:

inputting an encrypted second program, which has been encrypted based on an encryption key, from outside the IC card;

decrypting said encrypted second program according to said decryption program;

5

storing a decrypted second program in said second memory, said decrypted second program being executable by said microprocessor; and

rejecting the writing of an encrypted second program when said encrypted second program is not encrypted correctly.

11.   A processing method for a program writable IC card having a microprocessor, a first memory which stores both a first program which is executed by said microprocessor and a decryption program having a decryption function, wherein said first memory is a read only memory (ROM) which is not re-writable, a second memory, and an input unit, said processing method comprising:

inputting from an external device an encrypted second program, which has been encrypted based on an encryption key, via said input unit;

decrypting said encrypted second program according to said decryption program;

storing a decrypted second program in said second memory, said decrypted second program being executable by said microprocessor;

executing said decrypted second program stored in said second memory; and

rejecting the writing of an encrypted second program when said encrypted second program is not encrypted correctly.

12.   A processing method for a program writable IC card having a microprocessor, a first memory which stores a decryption program executed by said

6

microprocessor, wherein said first memory is a read only memory (ROM) which is not re-writable, and a second memory, said processing method comprising:

inputting an encrypted second program, which has been encrypted based on an encryption key, from an external device;

decrypting said encrypted second program according to said decryption program; and

storing a decrypted second program in said second memory,

wherein said second memory can be written only once, and

wherein said decrypted second program is executable by said

microprocessor; and

rejecting the writing of an encrypted second program when said encrypted second program is not encrypted correctly.

13.   A writing method for an IC card having a microprocessor, a ROM device which stores a first program which is executed by said microprocessor, a write control program having a decryption function, and a writable memory, said writing method comprising:

inputting an encrypted second program, which has been encrypted based on an encryption key, from an external device;

decrypting said encrypted second program according to said write control program;

storing a decrypted second program in said writable memory according to said write control program, said decrypted second program being executed by said microprocessor;

rejecting the writing of an encrypted second program when said encrypted second program is not encrypted correctly.

14. A writing method for an IC card having a microprocessor, a ROM device which stores both a first program which is executed by said microprocessor, a decryption program having a decryption function, a writable memory, and an input unit, said writing method comprising:

inputting an encrypted second program, which has been encrypted based on an encryption key, via said input unit from an external device;

decrypting said encrypted second program according to said decryption program;

storing a decrypted second program in said writable memory, said decrypted second program being executable by said microprocessor;

executing said decrypted second program stored in said writable memory; and

rejecting the writing of an encrypted second program when said encrypted second program is not encrypted correctly.

15. A program writable IC card comprising:

a first memory which stores a first program having a decryption function,

8